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Anschrift des Verfassers: Prof. Dr. ERICH THENIUS, Paläontologisches Institut der Universität, Universitätsstr. 7/II, A-1010 Wien

The distribution of the polecat, *Mustela putorius* in Fennoscandinavia, 1970-1974

By G. SAMARASINGHE

Department of Animal Ecology, University of Lund

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Introduction

Mustela putorius L. is one of the least known *Mustela* species with regard to distribution and ecology. The distribution can be determined by direct and indirect observation. The direct method entails sightings of living animals, trapping and hunting, together with the recording of dead animals. Indirect observation include such aspects as tracks, excrement, lair and nest sightings which can be related to the animal. The main drawback in these methods is that they are confined to a limited area, the factor of economy and time restricting the individual or group of researchers. It is therefore essential in any study of distribution covering larger areas or even countries, to have access to reliable information from many sources, the most important being scientific institutions, individual researchers on the animal or of closely related species, hunting and sporting associations, trappers, foresters and amateur naturalists. The following study includes all these sources.

Denmark

M. putorius was found in most areas (1969/70), well represented in Zealand and Fyn, but absent in the following islands, Aerø (54°–55°N, 11°–12°E), Amager (55°–56°N, 12°–13°E), Anholt (56°–57°N, 11°–12°E), Bornholm (55°–56°N, 15°E), Fanø (55°–56°N, 8°–9°E), Laesø (57°–58°N, 11°E), Langeland (55°N, 10°–11°E), Lolland Falster (54°–55°N, 11°–12°E), Møn (55°N, 12°–13°E), Romø (55°–56°N, 8°–9°E), Samsø (55°–56°N, 8°–9°E) and Tåsinge (55°N, 10°–11°E) (JENSEN and JENSEN 1972). There is little evidence of change in the pattern of distribution since then and it can be assumed to remain the same for the period 1970–1974. Population trends are difficult to ascertain, but hunting statistics have shown a downward trend and it is considered by the hunting community that there



Fig. 1. Distribution of *M. putorius* in Scandinavia (vertical lines)

is now a significant drop in the population of *M. putorius*, compared with 1940s and the early 1950s (JENSEN and JENSEN 1972).

Finland

The northernmost observation of *M. putorius* during winter 1973/74 was near the village of Mujejärvi ($63^{\circ}50'N$, $29^{\circ}30'E$) in the very north east of the county of Kuopio (unpubl.)¹. In west Finland, *M. putorius* was reported at its northernmost near the village of Yühärmä ($63^{\circ}10'N$, $22^{\circ}50'E$), in the county of Wasa (unpubl.)¹.



Fig. 2. Distribution of *M. putorius* in Finland (vertical lines)

¹ Vilt och Fiskeriforskningsinstitutet (1974), Uniongatan 45 B, 00170 Helsinki 17, Finland.

The northern limit of *M. putorius* is higher towards the east. This is supported by DANILOV and RUSAKOV (1969), who reported *M. putorius* in Karelia (USSR) as far north as the village of Rugozero (66°40'N, 30°50'E) to the village of Lendery (63°40'N, 31°30'E) and Nadvoitzy (63°55'N, 34°30'E). *M. putorius* has been observed in the winter 1973/74 (unpubl.)¹ in southern Finland in the counties of St. Michel, Kymmene, Nyland, Tavestehus, and in the county of Åbo and Björneborg. It is absent from the island of Åland. Very little can be said about population densities although from recent observations (unpubl.)² and DANILOV and RUSAKOV (1969) where higher population densities were found in the Leningrad area compared with Karelia, it may be assumed that *M. putorius* is more abundant in the south and south-east. The present distribution does not markedly differ from that given by KALELA (1948).

Norway

M. putorius has been reported in the following counties for the period 1970–1974, Aust-Agder, Hedmark, Oppland, Vestfold, Åkerhus and Østfold (unpubl.)³. The northern limit of *M. putorius* is close to 63°N, while the western limit extends to 7°E. This is a little further north than recorded earlier (HEPTNER 1964). It seems not to occur in Buskerud although it was reported during 1947–1953 (HAGEN 1963). Although the annual average estimated number of *M. putorius* shot and trapped for the period 1970–1974 is about 250 animals (unpubl.)⁴, which is a decline compared with the period 1949–1958 when the annual average was around 670 animals (HAGEN 1963), no definite conclusion can be reached regarding fluctuations in the population; one of several reasons being the decline in motivation for hunting *M. putorius* (HAGEN 1963). However, *M. putorius* was not found in Aust-Agder and Oppland (HAGEN 1963) during the period 1947–1959, and can therefore be said to have spread a little farther north and west within the last 10–15 years.

Sweden

In the Swedish provinces bordering Norway (below 63° N), *M. putorius* is absent in Härjedalen and Dalarna, while it is reported from Värmland (unpubl.)⁵. One *M. putorius* was shot near Lake Bjursjön north of the village of Torsby (60°10'N, 13° E) in 1972. This is the most recent northern find of *M. putorius* in Sweden. In Västmanland and Uppland, east of Värmland, no *M. putorius* has been sighted (1970–1973) and although unreliable sightings (confusing *M. vison* for *M. putorius*) have been made, it can be assumed free of *M. putorius* (unpubl.)⁶. The province of Södermanland earlier supporting a sparse population together with the county of Stockholm report absence of *M. putorius* for the period 1970–1973 (unpubl.)⁷. The remaining provinces farther south which all report captures and kills of *M. putorius*

² HELMINEN, M. (1974), Vilt och Fiskeriforskningsinstitutet, Helsinki.

³ Norges Jeger og Fiskeforbund (1974), Hvalstad, Norway and Central Bureau of Statistics of Norway, Dronningensgate 16, Oslo 1, Norway.

⁴ Central Bureau of Statistics of Norway (1974).

⁵ Värmlands läns Jaktvårdsförbund (1974), 652 24 Karlstad, Sweden.

⁶ Västmanlands Jaktvårdsförening (1974), 125 90 Västerås, Sweden.

⁷ Södermanlands Jaktvårdsförening, 64100 Katrineholm, Sweden, and Stockholms läns Jaktvårdsförening (1974), Stockholm, Sweden.

are Blekinge, Bohuslän, Dalsland, Halland, Närke, Skåne, Småland, Västergötland and Östergötland. *M. putorius* is absent from Gotland and Öland in the Baltic. The new 6 km bridge from the mainland to Öland will not facilitate the spread of *M. putorius*, partly due to its length and partly due to the sparse population of *M. putorius* in South Kalmar (unpubl.)⁸. The three southernmost provinces of Blekinge, Skåne and Småland presumably have the greatest density of population of *M. putorius* (ANON 1972/73). It is worth noting that the distribution seems to have changed slightly from that given by HEPTNER (1964) and SIIVONEN (1968), where no *M. putorius* was recorded north of Lake Vänern.

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Summary

A review of the latest information on the distribution of the polecat *Mustela putorius* in Denmark, Finland, Norway and Sweden is given. The distribution seems similar to that made in earlier studies, although slight changes are noted in Norway and Sweden.

Zusammenfassung

Die Verbreitung des Iltis Mustela putorius in Fennoskandinavien 1970—1974

Neuere Informationen über die Verbreitung des Iltis *Mustela putorius* in Dänemark, Finnland, Norwegen und Schweden sind zusammenfassend dargestellt. Die Verbreitung erscheint im wesentlichen mit früheren Untersuchungen identisch, wenn auch kleinere Änderungen des Arealen in Norwegen und Schweden deutlich werden.

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Author's address: Fil. Kand. GAMINI SAMARASINGHE, Department of Animal Ecology, University of Lund, Ecology Building, S-223 62 Lund, Sweden

⁸ Södra Kalmar läns Jaktvårdsförening (1974), Kalmar, Sweden.